

## THE SEVERE WINTER OF 1925-26 IN EUROPE

[Translated and slightly condensed from two notes by Charles Rabot in *La Nature*, January 16, 1926, Supplement, p. 17]

**Floods in Europe.**—The opening of December was marked in France and in northern and central Europe by very severe cold, with heavy snowfall, followed in France and central Europe by melting and heavy rains. Serious floods resulted, at certain points assuming truly catastrophic proportions. The regions most affected were the lowland of the Meuse, the region of the Lys, and the Escaut, and the valleys of the Oise and the Aisne. The rise in the Meuse was appreciably higher than that of 1910; the industrial towns in its valley, between Sedan and Givet, were severely affected, especially Givet, where the bursting of a dike caused the sudden flooding of fully a quarter of the town. In Belgium, the towns of Dinant, Namur, and Liege were flooded. The inundation was equally heavy in the valley of the Sambre, in the Charleroi Basin, and the Escaut Valley. The Oise rose higher than in 1910, and did particular damage to the villages of Compiègne and Creil. The Therain, an affluent of the Oise, flooded Beauvais and the surrounding regions. The Aisne overwhelmed the low parts of Rethel and the city of Soissons. Holland was still more affected, on account of the simultaneous rise of the Rhine and the Meuse, which caused bursting of dikes and the inundation of vast extents of country.

In Normandy, the village of Caen was hard hit by the rise of the Orne coincident with the backing up of a high tide. The Saone likewise rose abnormally. Severe floods are reported also from the Rhine Valley and north Germany.

**The winter in Scandinavia.**—In north Europe the cold appeared very early this season and with abnormal intensity. From Norway also come reports of a particularly severe winter.

In Sweden on the 20th of October a remarkable drop in temperature was observed, when  $-24^{\circ}$  C. was registered.

At Oslo, in southern Norway, November opened with very heavy snowfall, which, continuing during several days, interrupted communication in most districts. Throughout the month temperatures remained notably below normal, and since the beginning of December this departure has been increased. On December 1 at 8 a. m. in Oslo,  $-16.8^{\circ}$  C. was recorded; at Roros  $-28^{\circ}$  C.; in much of the country about the Norwegian capital veritable polar temperatures occurred, reaching as low as  $-40^{\circ}$  C.

Likewise in Denmark temperatures were abnormally low; at 8 a. m. on December 1, values below freezing were experienced over the whole country. In Jutland the thermometer went to  $-15^{\circ}$  C. On the 4th, several fjords on the east coast of that peninsula were already clogged with thick ice. In short, since the middle of the autumn a régime of cold has dominated Scandinavia and has persisted with abnormal vigor, recalling that of the hard winter of 1879.—*B. M. V.*

## OBSERVED SUNSPOT REALTIVE NUMBERS—WOLFER

The table below contains the final and revised relative sunspot numbers for the years 1920-1924, according to Wolfer, who has kindly supplied them to the journal *Terrestrial Magnetism and Atmospheric Electricity*, in which they appear in the June, 1925, issue.

These numbers are to replace the provisional numbers published in the *MONTHLY WEATHER REVIEW* for January, 1923, page 29.—*A. J. H.*

Observed sunspot relative numbers—Wolfer

	January	February	March	April	May	June	July	August	September	October	November	December	Annual
1920.....	51.1	53.9	70.2	14.8	33.3	38.7	27.5	19.2	36.3	49.6	27.2	29.9	37.6
1921.....	31.5	28.3	26.7	32.4	22.2	33.7	41.9	22.8	17.9	18.2	17.8	20.3	26.1
1922.....	11.8	26.4	54.7	11.0	8.0	5.8	10.9	6.5	4.7	6.2	7.4	17.5	14.2
1923.....	4.5	1.5	3.3	6.1	3.2	9.1	3.5	0.5	13.2	11.6	10.1	2.8	5.8
1924.....	0.5	5.1	1.8	11.3	20.8	24.0	28.1	19.3	25.1	25.6	22.5	16.5	16.7
1925.....	3.2	21.8	18.7	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

## DETERMINING THE TIME OF MOONRISE AND MOONSET

Referring to the article entitled "A Short Method of Determining the Time of Moonrise and Moonset" in the October, 1925, issue of the *MONTHLY WEATHER REVIEW*, it is thought that the following method may prove easier to understand than the method described in the article. It has been in use since 1918 at the Macon, Ga., office of the Weather Bureau, and found simple in practice.

First, Auxiliary Table A, Latitude Correction, was copied on the upper end of a card. Next, a table called "B" was made just below Auxiliary Table A. This new table is the result of adding Auxiliary Table B to the correction for local mean solar time. For example, longitude correction for a difference of 20 minutes according to Auxiliary Table B is  $+5$ . This was changed to  $+40$  by adding the difference ( $+35$  min.) between local mean solar time and seventy-fifth meridian time. In the same way all the corrections in Auxiliary Table B were changed.

When the two tables are used the moonrise or moonset can be found in about one minute.

**Reasoning used.**—Work from latitude  $35^{\circ}$ , Macon latitude  $32^{\circ} 50'$ .

Moonrise	Lat. $30^{\circ}$	Lat. $35^{\circ}$	Difference in minutes	Difference by Table A	Lat. $35^{\circ} 50'$	Correction Table B	Result
1926							
Jan. 1.....	19 25	19 15	10	4	19 19	+48	20:07
Jan. 2.....	20 18	20 09	9	4	20 13	-----	-----

Difference between 2 days=54.

54 according to Table B gives +48.

Result 20:07, is 8:07 p. m., January 1, 1926.

**What actually appears on paper.**—

Jan. 1 19 19+48 20:07  
2 20 13

54  
Jan. 2 20 13+48 21:01  
3 21 07

54  
Jan. 3 21 07+48 21:55  
4 22 01

54

Etc.—

*Harry Raynes.*

Mr. Raynes's method of computing moonrise and moonset is undoubtedly correct and clear-cut. There is no criticism except that "what actually appears on